

translation

PATENT COOPERATION TREATY

PCT/EP2003/003917



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/003917	International filing date (day/month/year) 15 April 2003 (15.04.2003)	Priority date (day/month/year) 19 April 2002 (19.04.2002)
International Patent Classification (IPC) or national classification and IPC C02F 1/50		
Applicant STADELMANN, Heinz, W.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
These annexes consist of a total of \_\_\_\_\_ sheets.

CORRECTED

- This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

VERSION

Date of submission of the demand 30 September 2003 (30.09.2003)	Date of completion of this report 06 August 2004 (06.08.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/003917

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-26 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-16 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages \_\_\_\_\_ 1/4-4/4 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/03917

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	4-9, 11-15	YES
	Claims	1-3, 10, 16	NO
Inventive step (IS)	Claims		YES
	Claims	1-16	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

## 2. Citations and explanations

## 1. Reference is made to the following documents:

D1: DE10029082

D2: Römpp Chemie Lexikon, pages 67-68, 4154-4156,  
9<sup>th</sup> edition, 1992, Georg Thieme-Verlag, Stuttgart

D2 was not cited in the international search report. A copy of the document is attached.

## 2. The application does not satisfy the requirements of PCT Article 6 because claims 10-15 are not clear:

As it is worded, claim 10 appears to relate to a product, yet it refers back to method claim 3. Contrary to PCT Article 6, the intended restrictions are not therefore clear from the claim. The same applies accordingly to dependent claims 11-15.

## 3. The subject matter of claims 1-3, 10 and 16 is not novel (PCT Article 33(2)):

D1 discloses a method for producing a sterilisation system wherein the surface of a noble metal is chemically etched, the noble metal being silver which is in the form of a base material comprising wire, wool or gauze (cf. D1,

page 2, lines 48-54 and fig. 1-3). For a person skilled in the art the use of an oxidative acid such as nitric acid is therefore implicitly disclosed, the reasons being as follows:

(i) The first claim of the present application contains in very general form only the method steps "acid oxidation of a noble metal surface" and "treatment in an aqueous salt solution". D1 discloses the chemical etching of an elemental silver surface (D1, page 2, lines 48-49). This is considered to be equivalent to "acid oxidation", since etching is generally defined as "modifying the surface of materials by the application of dissolving liquid or gaseous, chemically aggressive compounds" (D2, page 67, key word "Etching"). Furthermore, it is generally known that elemental silver (not just any oxide layer) is attacked chemically only by oxidising acids (cf. D2, pages 4154-4156, key word "Silver").

(ii) The fact that D1 is concerned with the removal of passivation layers does not conflict with this, since the etching process also involves dissolution of the existing passivation layer. This does not rule out the formation of, for example, a silver nitrate layer when nitric acid is used as etchant.

Consequently, D1 is considered to be prejudicial to the novelty of claims 1-3, 10 and 16. If these claims were to be worded clearly, this might lead to the acknowledgement of formal novelty in respect of the subject matter of the application. However, there would still be doubt as to the involvement of an inventive step (PCT Article 33(3)) (combination of D1 and D2).

4. Dependent claims 4-9 and 11-15 contain only optional

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

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PCT/EP 03/03917

features which do not contribute directly to the solution of the problem addressed by the present application (page 5, fifth paragraph). The PCT inventive step requirements are not therefore satisfied (PCT Article 33(3)).